

The background of the slide is a photograph of a vast field of golden wheat. In the distance, a range of mountains is visible under a clear sky. The text is overlaid on this image.

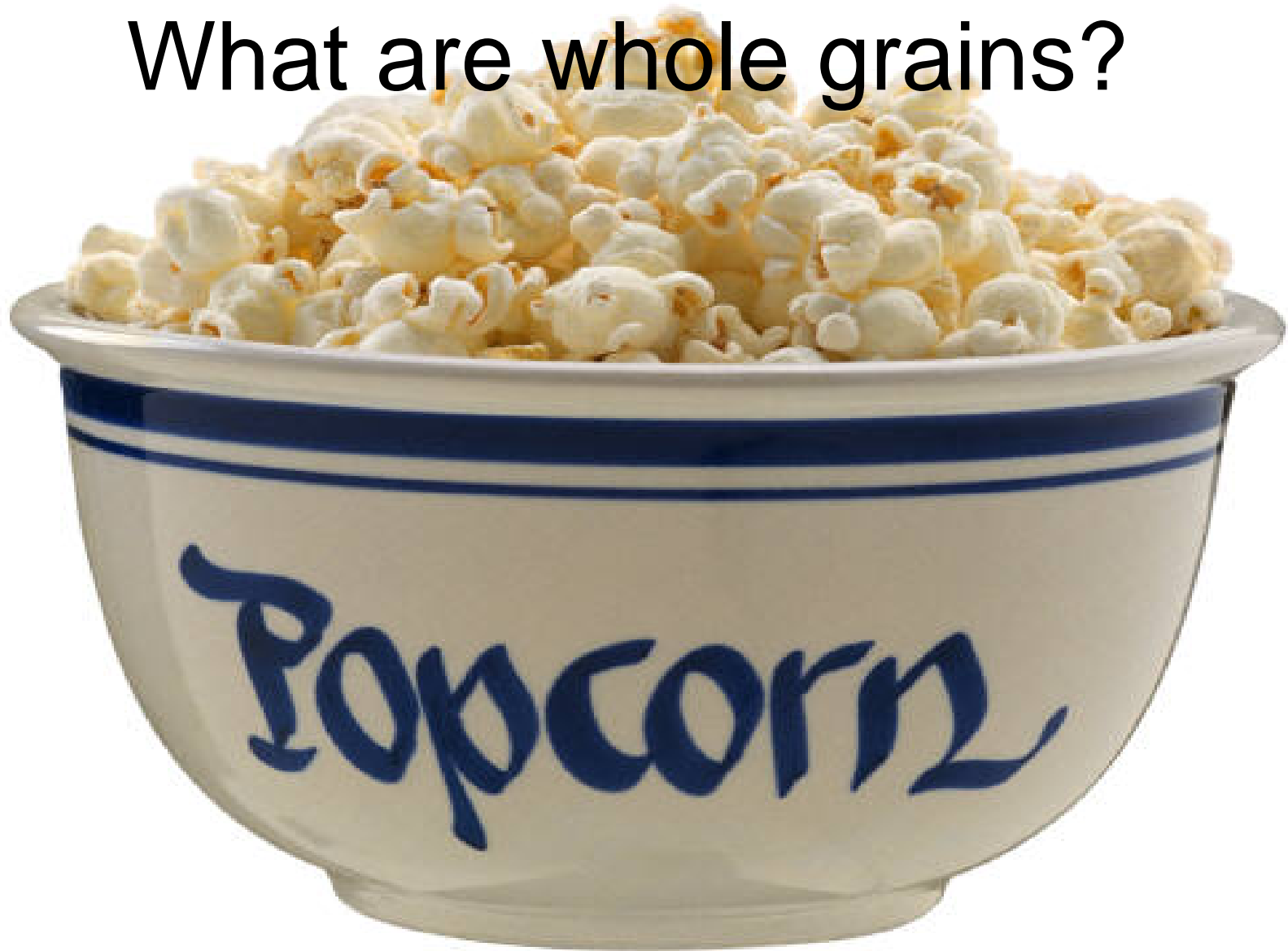
# Whole Grains and the HealthierUS School Challenge

Child and Adult Nutrition Services  
South Dakota Department of Education

# Overview

- What are whole grains
- Counting grains
- Incorporating whole grains
- The HealthierUS School Challenge

What are whole grains?



Amy Richards, MS, RD, LN

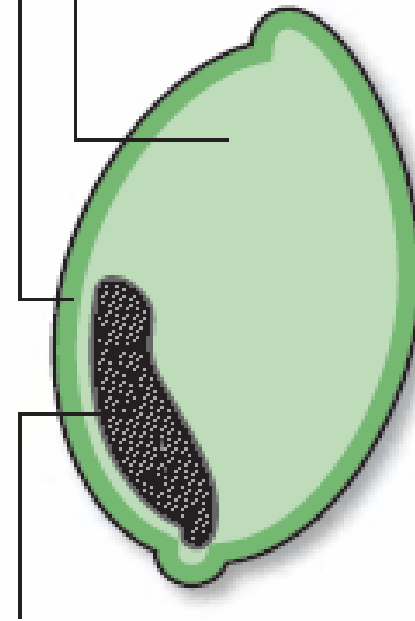
## Whole grain kernel

### Bran

"Outer shell" protects seed  
*Fiber, B vitamins, trace minerals*

### Endosperm

Provides energy  
*Carbohydrates, protein*



### Germ


Nourishment for the seed  
*Antioxidants, vitamin E, B vitamins*

# Industry derived definitions and labeling

- Whole Grain Council
  - Whole Grain Stamp: Excellent source, good source
- General Mills
  - Whole Grain statement on cereal boxes

# Government Derived Definitions

- FDA draft guidance for industry
- USDA guidance

A photograph of a vast, golden wheat field under a cloudy sky. In the background, there are rolling hills and a distant mountain range. The text is overlaid in the center of the image.

**So which one is the  
definition that you need to  
use????**

# Summary Guidance from USDA

- Read the label
- First ingredient should be whole grain
- **OR** package should have whole-grain health claim
  - If it has the claim it must be 51% or more whole grain
- Call manufacturer if unsure



# Reading labels

A whole grain ingredient will often include the word whole, entire, cracked, crushed or groats

– Source: Food Buying Guide

# Reading Labels

Let the buyer beware—creative marketing means that the wording can be misleading for whole grains

If in doubt, call the manufacturer

A photograph of a vast, golden wheat field under a cloudy sky. The wheat is in the foreground, and the field extends to the horizon. In the background, there are rolling hills or mountains under a blue sky with some clouds.

# **Crediting Grains in Child Nutrition Programs**

Jean Schuurmans, CANS

The background of the slide is a photograph of a vast, golden wheat field. The wheat stalks are in sharp focus in the foreground, creating a textured, busy pattern. In the distance, the field stretches out to a flat horizon under a pale, overcast sky. Faint, rolling hills or mountains are visible on the horizon line. The overall color palette is warm, dominated by the yellows and oranges of the wheat, with soft blues and greys in the sky and distant landscape.

# **Tips, ideas and resources for incorporating whole grains**

Amy Richards, MS, RD, LN,  
CANS

# Ideas for incorporating whole grains

- Whole grain sandwiches or sandwiches with 1 slice whole wheat and 1 slice white bread
- Whole grain tortillas-- burritos, soft tacos, etc.
- Whole wheat hotdog and hamburger buns

# Ideas continued

- Whole grain bagels
- Whole grain pita bread
- Whole grain English muffins
- Whole grain pizza crust
- Whole grain muffins

# Ideas continued

- Serve more varieties of whole grain breakfast cereal
  - Hot cereals like oatmeal, cream of brown rice and 10 grain cereals
  - Cold cereals like Shredded wheat, Wheaties, Raisin Bran, and granola

# Ideas continued

- Use whole grains in salads such as bulgur in tabouli salad
- Put whole grains on the salad bar
  - Granola topping
  - Low fat whole grain crackers
  - Whole grain croutons
  - Whole grain pasta salads-such as bowtie, rigatoni, macaroni, etc.



# Ideas continued

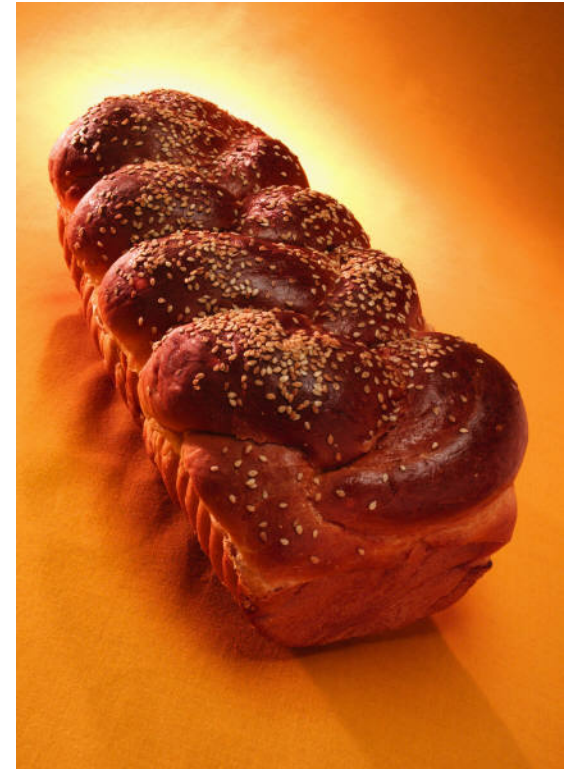
- Whole grain rice cakes
- Brown rice instead of white rice
- Whole grain pasta instead of regular pasta
  - Lasagna, Mac&cheese, pasta salad, spaghetti
- ½ brown rice or ½ whole grain pasta mix
- Use whole corn meal for corn muffins and corn bread

# Ideas continued

- Low fat whole grain crackers
- Whole grain cereal bars
- Unbuttered popcorn—(but not credible for CNP or HealthierUS School Challenge)
- Baked whole grain chips
- Whole grain cookies, cakes and desserts

# Baking tips

- If modifying a bread recipe-substitute whole grain flour gradually to get student acceptance until you reach 51 percent or more whole grain flour in the recipe



# Baking tips

**To substitute whole wheat flour  
for all of the white flour in a  
recipe—**

**Substitute cup for cup except  
subtract 1-tablespoon for every  
cup of flour that is being  
replaced.**

Source: Wheat Foods Council



# Baking tips

## **For a lighter loaf of whole wheat bread**

Add 1-tablespoon liquid and 1-tablespoon gluten flour for every cup of whole wheat flour in the recipe.

Source: Wheat Foods Council



# Baking tips

**Substitute oatmeal for 1/3 of the flour in a recipe**

Source: Quaker Oats





# Tips for using whole grains

- Roast whole grains to bring out a nutty flavor before using in recipes
- Use ground whole grains instead of bread crumbs in recipes



# Tips for using whole grains

- Use whole grains or oatmeal in meatloaf
- Add wild rice, brown rice and barley to soup
- Add whole grain pasta to soup





# Tips for using whole grains

Try using brown rice in a stuffed green pepper recipe

Put wild rice, bulgur, or barley in bread stuffing

Be creative—put oatmeal in things like lemon poppy seed cake



# What has worked for you?



# ND Cooperative Extension Recipes

- North Dakota Cooperative Extension
  - 100% Whole Wheat Muffin Recipe
- <http://www.ext.nodak.edu/extnews/newsrelease/2005/090805/03prairi.htm>
  - Whole Wheat Sourdough Starter
- <http://www.ext.nodak.edu/extnews/newsrelease/2002/042502/03prairi.htm>
  - 100% Whole Wheat Chocolate Sheet Cake
- [http://www.ext.nodak.edu/extnews/newsrel ease/2005/021005/03prairi.htm](http://www.ext.nodak.edu/extnews/newsrelease/2005/021005/03prairi.htm)

# Recipe sources

- A long list of various sites with recipes
  - <http://directory.google.com/Top/Home/Cooking/Grains/>
- Oatmeal recipes--Quaker Oats
- <http://www.quakeroatmeal.com/kitchen/recipes/index.cfm>
- Barley recipes—Barley Foods Council
- <http://www.barleyfoods.org/recipes.html>

# Tips for finding recipes on the Internet

University of  
Nebraska-Lancaster  
Cooperative  
Extension

–<http://lancaster.unl.edu/food/ciqj.htm>



# Websites with info about grains

- Clemson University Cooperative Extension
- <http://hgic.clemson.edu/factsheets/HGIC4019.htm>
- Wheat Foods Council
- <http://www.wheatfoods.org/Resource-Flourdifference/Index.htm>
- Whole Grain Council
- <http://www.wholegrainscouncil.org/WGAtoZ.html>

A photograph of a vast, golden wheat field under a dramatic, cloudy sky. The wheat is in the foreground, swaying in the wind. In the background, there are rolling hills and a distant mountain range. The text "So what are others doing?" is overlaid in the center of the image.

**So what are  
others doing?**



# **HealthierUS School Challenge**

**Kris Sands, RD, LN  
Jean Schuurmans,  
CANS**